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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/673,490B

DATE: 10/30/2002  
TIME: 16:02:48

Input Set : A:\13922.txt  
Output Set: N:\CRF4\10302002\I673490B.raw

3 <110> APPLICANT: The University of Queensland  
 5 <120> TITLE OF INVENTION: Novel omega conotoxin peptides  
 7 <130> FILE REFERENCE: 2338740/MJC  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/673,490B  
 10 <141> CURRENT FILING DATE: 1999-04-16  
 12 <150> PRIOR APPLICATION NUMBER: PCT/AU99/00288  
 13 <151> PRIOR FILING DATE: 1999-04-16  
 15 <160> NUMBER OF SEQ ID NOS: 44  
 17 <170> SOFTWARE: PatentIn version 3.0  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 6  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: conus catus  
 24 <400> SEQUENCE: 1  
 26 Ser Gly Thr Val Gly Arg  
 27 1 5  
 29 <210> SEQ ID NO: 2  
 30 <211> LENGTH: 6  
 31 <212> TYPE: PRT  
 32 <213> ORGANISM: conus catus  
 34 <400> SEQUENCE: 2  
 36 Ser Lys Leu Met Tyr Asp  
 37 1 5  
 40 <210> SEQ ID NO: 3  
 41 <211> LENGTH: 6  
 42 <212> TYPE: PRT  
 43 <213> ORGANISM: Artificial Sequence  
 45 <220> FEATURE:  
 46 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified version of the second  
 47 loop of CVID  
 49 <400> SEQUENCE: 3  
 51 Ser Arg Leu Met Tyr Asp  
 52 1 5  
 54 <210> SEQ ID NO: 4  
 55 <211> LENGTH: 6  
 56 <212> TYPE: PRT  
 57 <213> ORGANISM: Artificial Sequence  
 59 <220> FEATURE:  
 60 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified version of the second  
 61 loop of CVID  
 63 <400> SEQUENCE: 4  
 65 Asp Arg Leu Met Tyr Asp

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Input Set : A:\13922.txt  
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68 <210> SEQ ID NO: 5  
69 <211> LENGTH: 27  
70 <212> TYPE: PRT  
71 <213> ORGANISM: conus catus  
73 <400> SEQUENCE: 5  
75 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys  
76 1 5 10 15  
79 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
80 20 25  
83 <210> SEQ ID NO: 6  
84 <211> LENGTH: 27  
85 <212> TYPE: PRT  
86 <213> ORGANISM: Artificial Sequence  
88 <220> FEATURE:  
89 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified form of CVID  
91 <400> SEQUENCE: 6  
93 Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys  
94 1 5 10 15  
96 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
97 20 25  
100 <210> SEQ ID NO: 7  
101 <211> LENGTH: 27  
102 <212> TYPE: PRT  
103 <213> ORGANISM: Artificial Sequence  
105 <220> FEATURE:  
106 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified form of CVID  
108 <400> SEQUENCE: 7  
110 Cys Lys Ser Lys Gly Ala Lys Cys Asp Arg Leu Met Tyr Asp Cys Cys  
111 1 5 10 15  
113 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
114 20 25  
116 <210> SEQ ID NO: 8  
117 <211> LENGTH: 25  
118 <212> TYPE: PRT  
119 <213> ORGANISM: conus magus  
121 <400> SEQUENCE: 8  
123 Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys  
124 1 5 10 15  
126 Thr Gly Ser Cys Arg Ser Gly Lys Cys  
127 20 25  
129 <210> SEQ ID NO: 9  
130 <211> LENGTH: 26  
131 <212> TYPE: PRT  
132 <213> ORGANISM: conus magus  
134 <400> SEQUENCE: 9  
136 Cys Lys Gly Lys Gly Ala Pro Cys Arg Lys Thr Met Tyr Asp Cys Cys  
137 1 5 10 15  
139 Ser Gly Ser Cys Gly Arg Arg Gly Lys Cys  
140 20 25

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**PATENT APPLICATION:** US/09/673,490B **TIME:** 16:02:48

Input Set : A:\13922.txt  
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142 <210> SEQ ID NO: 10  
143 <211> LENGTH: 27  
144 <212> TYPE: PRT  
145 <213> ORGANISM: conus geographus  
147 <220> FEATURE:  
148 <221> NAME/KEY: misc\_feature  
149 <223> OTHER INFORMATION: Pro at positions 4, 10 and 21 is 4-Hyp  
151 <400> SEQUENCE: 10  
153 Cys Lys Ser Pro Gly Ser Ser Cys Ser Pro Thr Ser Tyr Asn Cys Cys  
154 1 5 10 15  
156 Arg Ser Cys Asn Pro Tyr Thr Lys Arg Cys Tyr  
157 20 25  
160 <210> SEQ ID NO: 11  
161 <211> LENGTH: 18  
162 <212> TYPE: DNA  
163 <213> ORGANISM: conus catus  
165 <400> SEQUENCE: 11  
167 agcggcaccc taggtaga 18  
170 <210> SEQ ID NO: 12  
171 <211> LENGTH: 382  
172 <212> TYPE: DNA  
173 <213> ORGANISM: conus catus  
175 <220> FEATURE:  
176 <221> NAME/KEY: CDS  
177 <222> LOCATION: (10)..(228)  
179 <400> SEQUENCE: 12  
181 atcatcaaaa atg aaa ctg acg tgt gtg gtg atc gtc gcc gtg ctg ctc ctg 51  
182 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu  
183 1 5 10  
185 acg gcc tgt caa ctc atc aca gct aat gac tcc aga ggt acg cag aag 99  
186 Thr Ala Cys Gln Leu Ile Thr Ala Asn Asp Ser Arg Gly Thr Gln Lys  
187 15 20 25 30  
189 cat cgt gcc ctg agg tcg gac acc aaa ctc tcc atg tcg act cgc tgc 147  
190 His Arg Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys  
191 35 40 45  
193 aag agt aaa gga gca aaa tgt tca aag ctt atg tat gac tgc tgc agc 195  
194 Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys Ser  
195 50 55 60  
197 ggt tct tgc agc ggc acc gta ggt aga tgt ggc tgatccggcg cttgatctcc 248  
198 Gly Ser Cys Ser Gly Thr Val Gly Arg Cys Gly  
199 65 70  
201 cccttctgtg ctctatccctt ttctgcctga gtcctcctta cctgagagtg gtcatgaacc 308.  
203 actcatcacc tacccctgg aggtctcaa gaactacttg aaataaagcc gcttgcaaaa 368  
205 aaaaaaaaaaaa aaaa 382  
208 <210> SEQ ID NO: 13  
209 <211> LENGTH: 73  
210 <212> TYPE: PRT  
211 <213> ORGANISM: conus catus  
213 <400> SEQUENCE: 13

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215 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala  
216 1 5 10 15  
219 Cys Gln Leu Ile Thr Ala Asn Asp Ser Arg Gly Thr Gln Lys His Arg  
220 20 25 30  
223 Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Ser  
224 35 40 45  
227 Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys Ser Gly Ser  
228 50 55 60  
231 Cys Ser Gly Thr Val Gly Arg Cys Gly  
232 65 70  
235 <210> SEQ ID NO: 14  
236 <211> LENGTH: 27  
237 <212> TYPE: PRT  
238 <213> ORGANISM: conus catus  
240 <400> SEQUENCE: 14  
242 Cys Arg Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys  
243 1 5 10 15  
245 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
246 20 25  
248 <210> SEQ ID NO: 15  
249 <211> LENGTH: 27  
250 <212> TYPE: PRT  
251 <213> ORGANISM: conus catus  
253 <400> SEQUENCE: 15  
255 Cys Lys Ser Lys Gly Ala Arg Cys Ser Lys Leu Met Tyr Asp Cys Cys  
256 1 5 10 15  
258 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
259 20 25  
261 <210> SEQ ID NO: 16  
262 <211> LENGTH: 27  
263 <212> TYPE: PRT  
264 <213> ORGANISM: conus catus  
266 <400> SEQUENCE: 16  
268 Cys Lys Ser Lys Gly Ala Gln Cys Ser Lys Leu Met Tyr Asp Cys Cys  
269 1 5 10 15  
271 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
272 20 25  
274 <210> SEQ ID NO: 17  
275 <211> LENGTH: 27  
276 <212> TYPE: PRT  
277 <213> ORGANISM: conus catus  
279 <400> SEQUENCE: 17  
281 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys  
282 1 5 10 15  
285 Ser Gly Ser Cys Ser Gly Ala Val Gly Arg Cys  
286 20 25  
288 <210> SEQ ID NO: 18  
289 <211> LENGTH: 27  
290 <212> TYPE: PRT

RAW SEQUENCE LISTING  
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DATE: 10/30/2002  
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Output Set: N:\CRF4\10302002\I673490B.raw

291 <213> ORGANISM: Artificial Sequence  
293 <220> FEATURE:  
294 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID  
296 <400> SEQUENCE: 18  
298 Cys Lys Ser Lys Gly Ala Lys Cys Asp Lys Leu Met Tyr Asp Cys Cys  
299 1 5 10 15  
301 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
302 20 25  
304 <210> SEQ ID NO: 19  
305 <211> LENGTH: 27  
306 <212> TYPE: PRT  
307 <213> ORGANISM: Artificial Sequence  
309 <220> FEATURE:  
310 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID  
312 <400> SEQUENCE: 19  
314 Cys Lys Tyr Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys  
315 1 5 10 15  
317 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
318 20 25  
320 <210> SEQ ID NO: 20  
321 <211> LENGTH: 27  
322 <212> TYPE: PRT  
323 <213> ORGANISM: Artificial Sequence  
325 <220> FEATURE:  
326 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID  
328 <400> SEQUENCE: 20  
330 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Ala Tyr Asp Cys Cys  
331 1 5 10 15  
333 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
334 20 25  
336 <210> SEQ ID NO: 21  
337 <211> LENGTH: 27  
338 <212> TYPE: PRT  
339 <213> ORGANISM: Artificial Sequence  
341 <220> FEATURE:  
342 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID  
344 <400> SEQUENCE: 21  
346 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys  
347 1 5 10 15  
349 Thr Gly Ser Cys Ser Gly Thr Val Gly Arg Cys  
350 20 25  
352 <210> SEQ ID NO: 22  
353 <211> LENGTH: 27  
354 <212> TYPE: PRT  
355 <213> ORGANISM: Artificial Sequence  
357 <220> FEATURE:  
358 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID  
360 <220> FEATURE:  
361 <221> NAME/KEY: misc\_feature

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 10/30/2002  
PATENT APPLICATION: US/09/673,490B                    TIME: 16:02:49

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:22; Xaa Pos. 5  
Seq#:30; Xaa Pos. 12  
Seq#:31; Xaa Pos. 12  
Seq#:37; Xaa Pos. 4  
Seq#:38; Xaa Pos. 4  
Seq#:39; Xaa Pos. 2,3,4,6,7,9,12,14,17,22

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:33; Line(s) 567  
Seq#:34; Line(s) 581  
Seq#:35; Line(s) 595  
Seq#:36; Line(s) 613  
Seq#:37; Line(s) 631  
Seq#:38; Line(s) 650